

Amendment to Claims

Pursuant to 37 C.F.R. §1.121 the following is a complete listing of the claims of the present application. In this set of claims, please cancel claims 1 to 53, and add new claims 54 to 61. With the amendments to the aforementioned claims, the following listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-53 Cancelled.

54. (NEW) A method of treating obesity in a mammal having a deficiency in functional leptin comprising administering intravenously to the mammal an adenoviral vector comprising a DNA sequence encoding a leptin operably linked to a promoter and expressing the DNA sequence, wherein the mammal exhibits a decrease in body weight, a decrease in serum glucose levels and/or a decrease in serum insulin levels.

55. (NEW) A method according to claim 54 wherein the adenoviral vector is expressed in liver.

56. (NEW) A method according to claim 54 wherein the mammal is a human.

57. (NEW) A method for treating obesity in a mammal comprising administering to the mammal an adenoviral vector comprising a DNA sequence encoding an OB polypeptide operably linked to an expression control sequence and expressing the DNA sequence wherein the mammal exhibits a decrease in body weight, a decrease in glucose levels and/or decrease in insulin levels.

58. (NEW) The method according to claim 57 wherein the mammal has a deficiency in functional leptin.

59. (NEW) The method according to claim 57 or 58 wherein the adenoviral vector is administered intravenously to the mammal.

60. (NEW) The method of claim 57 or 58 wherein the mammal is a human.

61. (NEW) The method of claim 59 wherein the mammal is human.